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POLICY DOCUMENTATION  
LOG NO. 2276  
CLASS. NO. 53511  
Solvents

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January 9, 1942  
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TO: Bureau of Industrial Conservation  
FROM: W. H. Chamberlain, Chief, Chlorine Unit, Chemical Section  
SUBJECT: Conservation of chlorinated solvents.

Doubtless you are aware of the fact that chlorine at the present moment is a very tight material with every indication of becoming tighter as new demands for the Victory Program are received. At the present moment, there are less than 75,000 tons of chlorine available for civilian use during the year 1942 without considering the above mentioned Victory demands.

Chlorine, as such, is not used extensively but is necessary for the manufacture of a very large number of chlorinated products and the 75,000 tons mentioned above is but 12 1/2 per cent of the 600,000 tons consumed for civilian use during the year 1939. It is easy to see, therefore, that we are considerably under the minimum civilian demands which in pre-war days were set at a figure of 300,000 tons per year in line with the general policy of not cutting any civilian requirements in war time to less than 50 per cent of the peace time figure.

One of the biggest single demands for chlorine is for the manufacture of chlorinated products such as trichlorethylene, carbon tetrachloride, ethylene dichloride, perchlorethylene, and methyl chloride. The greatest use for all of the above solvents is in the metal degreasing field and from the chlorine figures given above, along with the fact that only 1/3 of the airplane motor plants are in production, you can see that we will be unable to supply the demand for chlorinated solvents for plants now under construction without even considering the additional demands to be expected as a result of the recent speeches by the President and the Under Secretary of War.

We have just undertaken a program to substitute the use of alkali cleaners for chlorinated solvents wherever possible in order that the available chlorinated solvents may be put to the best possible uses in such places as airplane and tank motor plants, airplane part plants, and so on. This will involve no more than an educational

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December 20, 1941

Mr. H. H. Harkins

Mr. H. Harkins, Jr.

Re: Letter of December 10, 1941, regarding the substitution of chlorinated solvents.

Dear Mr. Harkins and Mr. Harkins, Jr.:

We believe that the switch-over from chlorinated solvents to alkali cleaners will not work too much of a hardship on industry if the idea of using the alkali cleaners can be sold to those who are not now using them.

We believe like an opportunity to meet with you at your earliest convenience to discuss this problem more fully. We believe that you will wish to cooperate with us as much as possible.

1. A new program much bigger than the old one will offer greater saving opportunity.

2. Important Alkali Points

- A. Alkalies should be used on vegetable oil base cutting, buffing, etc., oils and compounds. Animal oils produce soap.
- B. Alkalies used more than to do some work as Chlorine Solvents.
- C. Alkalies should not be used for work in which there are oil residues, nicks, etc., where speed is essential.
- D. Small, short, dry, high-pressure spraying, tanks are really converted to alkalies by changing the oil to water.

3. Recommendations for saving Chlorine Solvents

- A. In order to stop new installation of chlorinated solvents.
- B. No new installation with old equipment. A new equipment should be allowed to install them—they should continue to use old.
- C. No chlorinated solvent should be used on new equipment.
- D. Eliminate new equipment prior to new equipment. (This is 20% to 40% of present production.)
- E. No chlorinated solvent should be used on new equipment or general industrial equipment.